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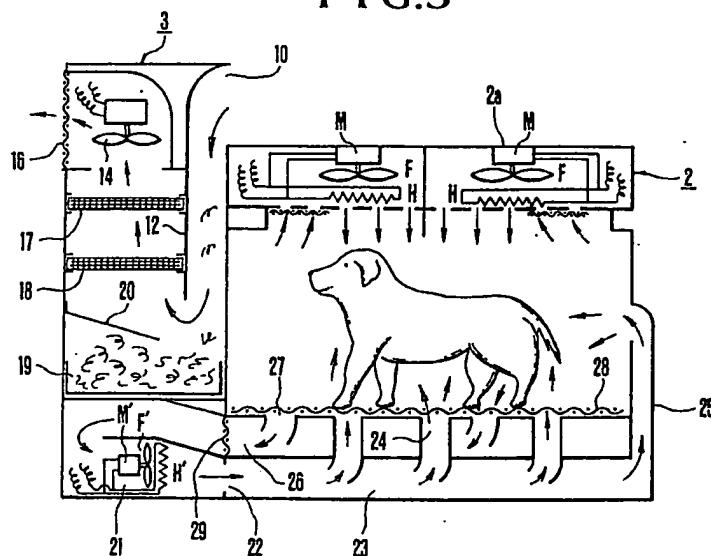
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(58) Field of search
A1M

(54) Drying animals and collecting hair

(57) An apparatus for drying and collecting pet animal's hair comprises a box type room for accommodating the pet animal, a drier unit (2) disposed above the room for sending warm air toward the animal from the top of the animal to dry animal's hair, a hair collecting room (3) disposed adjacent to the accommodating room and including a suction fan (14), filters (17, 18) and a hair collecting container (19), and a drying device (21) disposed in the bottom of the hair collecting room for sending warm air through a duct toward the animal from the side and bottom portions of the animal in the accommodating room to dry the animal completely and rapidly.

FIG.3



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FIG. 1

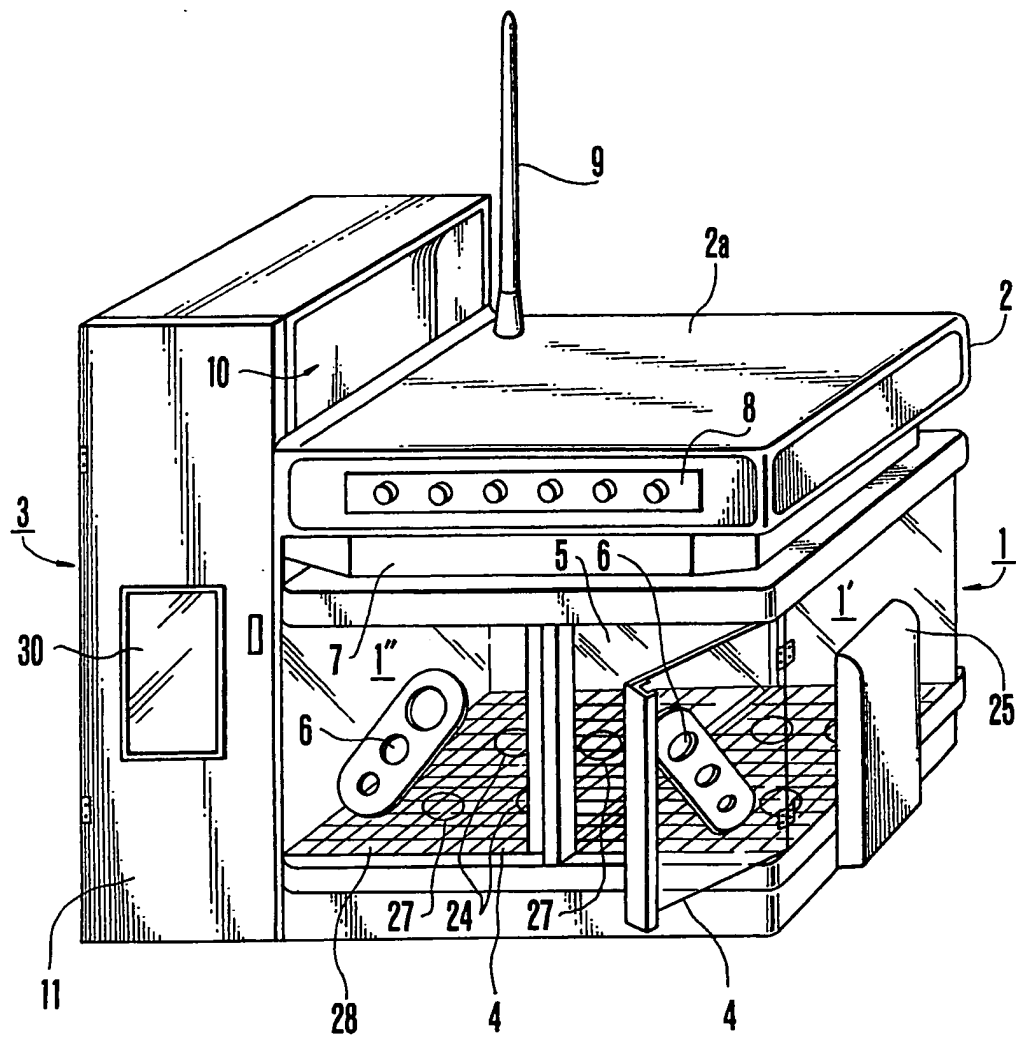


FIG. 2

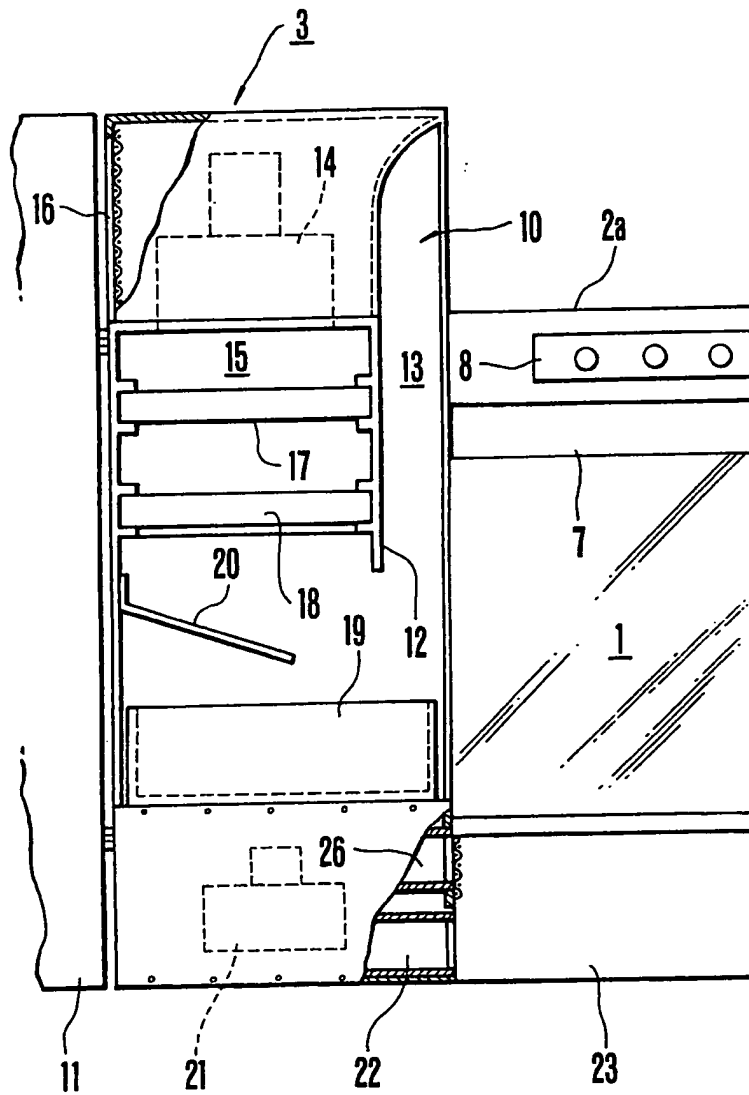


FIG. 3

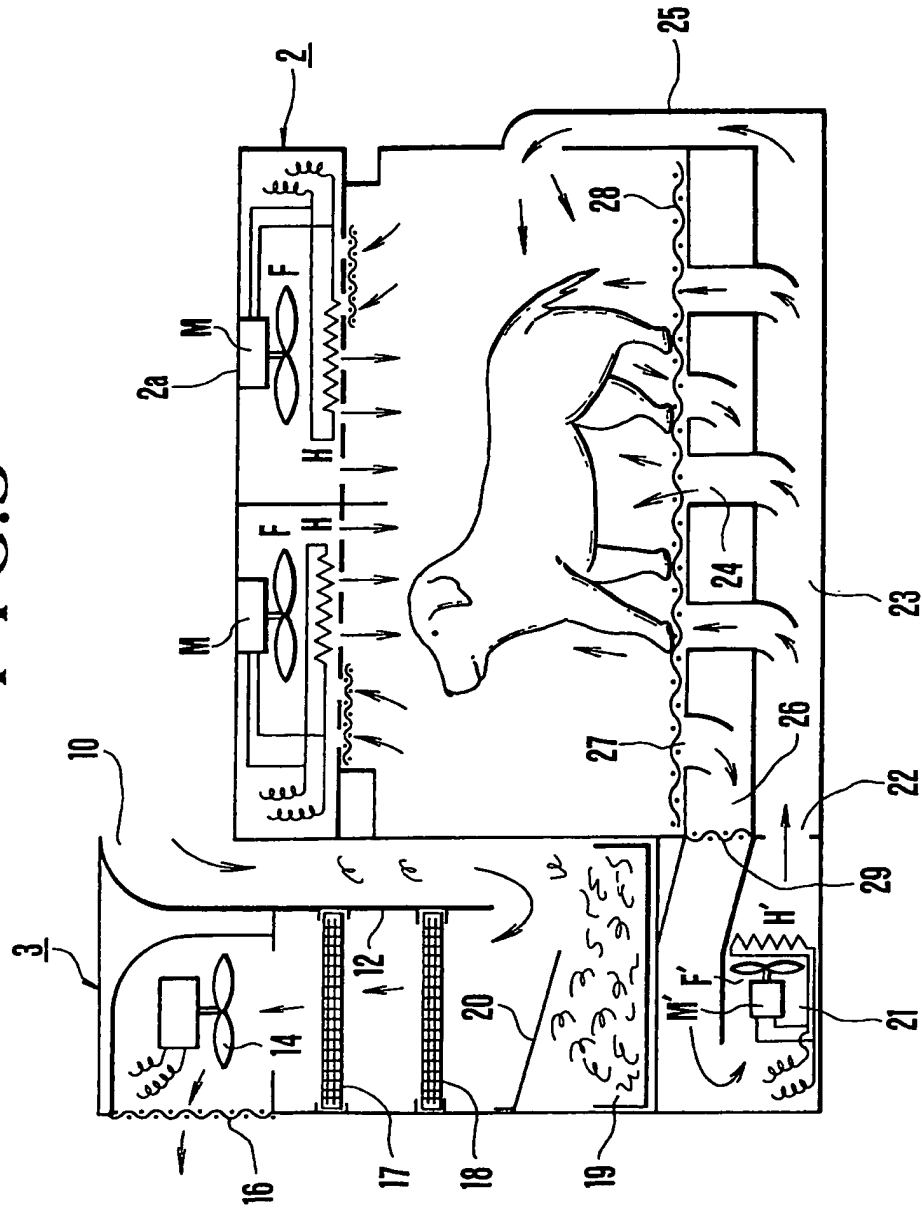


FIG. 4

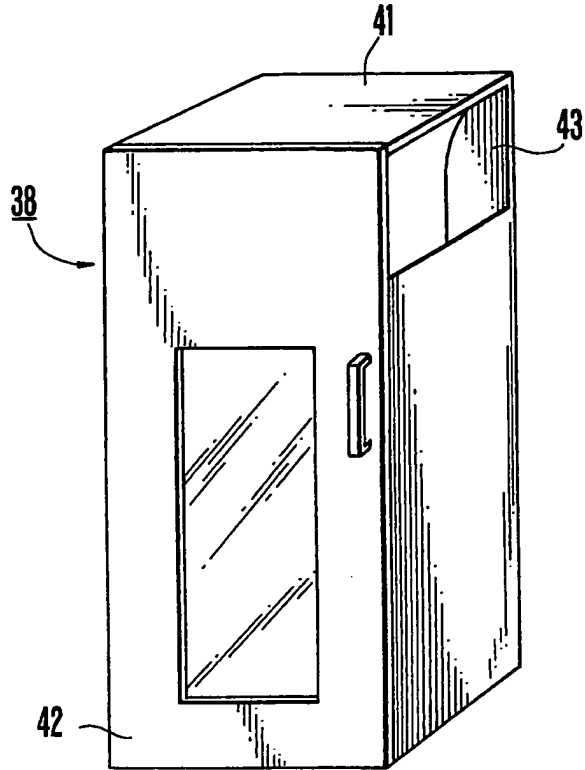


FIG. 5

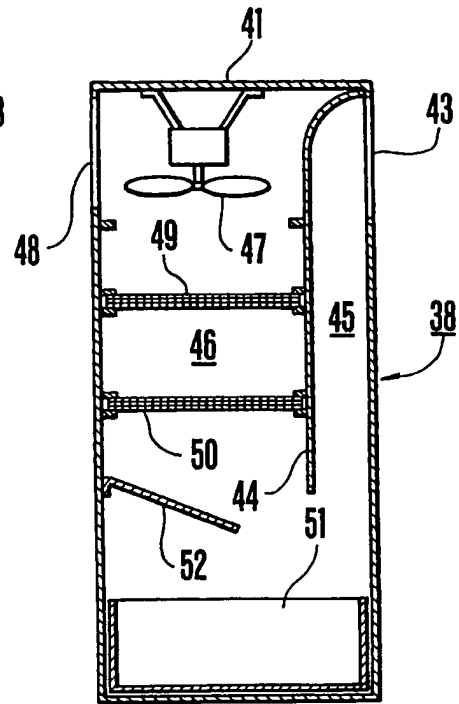


FIG. 6

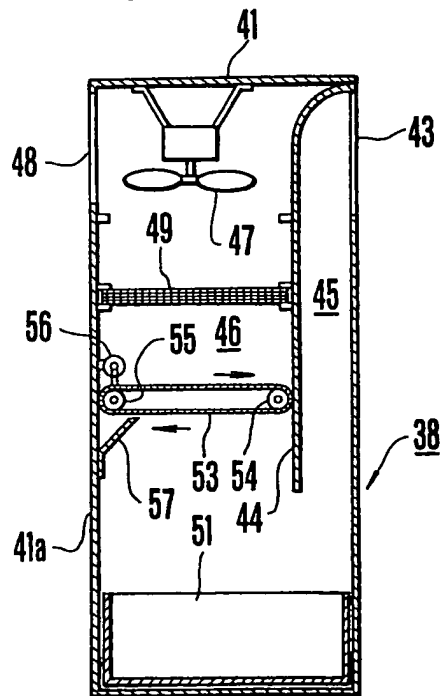
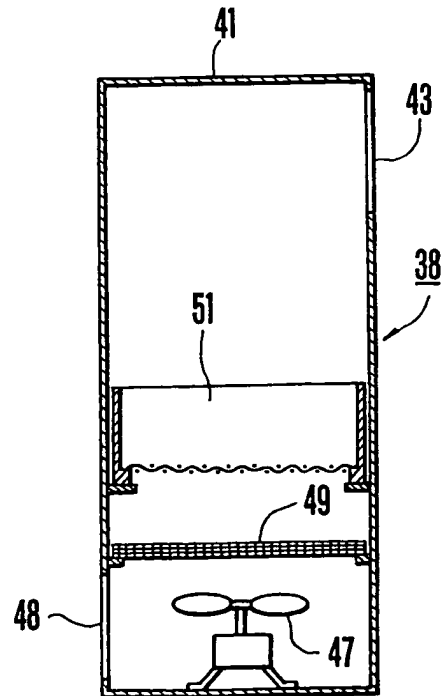


FIG. 7



SPECIFICATION

Apparatus for Drying Pet Animal's Hair

Field of the Invention

The present invention relates to an apparatus
 5 for drying pet animal's hair, and more particularly
 to an apparatus for drying hair of the pet animal,
 specifically a dog, and for trimming the hair
 cleanly after the animal has been washed, and
 which can also be used as a trimming table.

10 Background of the Invention

A pet animal is raised within a house or home
 or near the house and therefore it is desirable that
 the pet animal is always clean. It is also necessary
 to bathe or wash the animal and thereafter trim
 15 hair thereof.

Heretofore, a box type hair drier is used for
 drying wet hair of a pet animal such as a dog after
 hair has been washed. The drier contains a drying
 device disposed in the upper portion thereof to
 20 send warm air to the dog accommodated in a
 room disposed under the drying device so that the
 animal's hair and skin are dried by warm air.
 However, since such a drier sends warm air to the
 dog only from the upper side thereof and does not
 25 directly send warm air to the side and lower
 surfaces of the dog, such surfaces are not
 sufficiently dried. It takes long time to dry the side
 and lower portions of the dog sufficiently and thus
 the dog must be kept in the room for a long time,
 30 so that the dog hates such conditions.

Further, while the animal's hair is dried after
 bathing, or while the dog's hair is brushed, cut or
 trimmed after the dog's hair has been completely
 dried, hair is scattered in the air to make the room
 35 dirty, and a person who brushes or trims the
 animal's hair sucks hair scattered in the air, so
 that the person suffers from an occupational
 disease.

Summary of the Invention

Therefore, it is an object of the present
 40 invention to provide an apparatus for drying pet
 animal's hair comprising a room for
 accommodating the animal and capable of being
 partitioned with a wall and which is so
 45 constructed that warm air can be sent from the
 side and bottom portions as well as the upper
 portion to the animal in the room to rapidly dry
 hair of the animal, specifically a dog, and
 comprises a collection room for collecting hair
 50 scattered in the air when trimming the animal's
 hair after the hair has been dried.

It is another object of the present invention to
 provide an apparatus for collecting scattered hair
 comprising a box type body, a suction fan, a
 55 suction inlet, an exhaust port, a filter and a hair
 collecting container, whereby hair scattered from
 the animal can be collected to cleanly trim the
 animal.

According to the present invention, the pet
 60 animal's hair drying apparatus includes a partition
 wall for partitioning the room for accommodating
 the animal in dependence on the size of the

animal or in dependence on objects of using the
 room so that the animal accommodated in the
 65 room is effectively dried by warm air depending
 on the size of the animal or the uses thereof, and
 is so constructed that warm air is sent toward the
 top, side and bottom portions of the animal in
 circulation to dry the animal's hair rapidly on the
 70 average.

Further, according to the present invention,
 after the animal's hair has been dried, brushing
 and trimming of the animal's hair can be made on
 a trimming table disposed on the drying room.
 75 Hair scattered during the brushing and trimming
 operation is sucked into the hair collecting room
 to be collected in a hair collecting container, and
 the sucked air is exhausted through filters to the
 outside of the room to prevent air containing
 80 remaining hair or dust from floating or being
 scattered in the room. Furthermore, by operating
 the suction fan at all times, the floating hair
 caused by motions of the dog is prevented from
 being sucked by a person to suffer from an
 85 occupational disease, so that the animal can be
 trimmed in very clean and healthy conditions.

Brief Description of the Drawings

The above and other objects of the present
 invention will become more readily apparent as
 90 the invention is more clearly set forth in the
 detailed description, and in which:

Figure 1 is a perspective view of an apparatus
 for drying pet animal's hair according to one
 embodiment of the present invention;

95 Figure 2 is a front view of a hair collecting
 room of the apparatus;

Figure 3 is an inside view of the apparatus for
 illustrating the flow of air;

100 Figure 4 is a perspective view of a hair
 collecting apparatus showing an embodiment
 according to the present invention;

Figure 5 is a cross-sectional view of the
 apparatus of Figure 4;

105 Figure 6 is a cross-sectional view of a hair
 collecting apparatus showing another
 embodiment according to the present invention;
 and

110 Figure 7 is a cross-sectional view of a hair
 collection apparatus showing still another
 embodiment according to the present invention.

Detailed Description of the Preferred Embodiments

A hair drying apparatus shown in Fig. 1
 comprises a box type room 1 for accommodating
 115 an animal a drier unit 2 disposed above the room
 1 through a duct 7 and a hair collecting room 3
 disposed at one side of the room 1.

The room 1 serves to dry hair of the animal, for
 example a dog, after washing the dog and is
 120 formed of transparent glass, methacrylate plastic
 plate or the like. However, it is not necessary that
 the whole room 1 is entirely formed of the
 transparent material. Only a part of the room 1
 may be formed of the transparent material so as
 125 to be able to observe the inside of the room

through the transparent portion. Doors 4 for an entrance and exit are hingedly mounted on another side of the room 1. A partition wall 5 which can be removed from and fit in the room 1 is disposed in the room 1. A net or a draining board 28 is disposed on the bottom of the room 1. The partition wall 5 serves to partition the room 1 in accordance with the size of the dog and form two small rooms, while the partition wall may be removed to make a single large room. Accordingly, there are provided at least two holes 6 through which the dog accommodated in the room 1 sticks its nose out so that the dog can breathe fresh air. The drier unit 2 includes a proper number of motors M, fans F and heaters H for producing warm air correspondingly to the partitioning condition of the room 1 to send it to the inside of the room 1 through the duct 7 so that warm air circulates in the room 1. Reference numeral 8 represents an operating panel of the drier unit, which contains a temperature adjusting switch, a wind adjusting dial, a power switch and the like. The top surface of the drier unit 2 forms a trimming table 2a in the form of a flat plate and a pole 9 for holding the dog in leash is removably provided at the corner of the table 2a. The hair collecting room 3 is removably mounted adjacent to the room 1. The hair collecting room 3 is provided with a suction opening 10 disposed on the upper side portion thereof and directed toward the trimming table 2a. A transparent door or a door 11 provided with a transparent window 30 is mounted on the front surface of the hair collecting room 3.

Referring to Fig. 2, the hair collecting room 3 is partitioned by means of a partition wall 12 to form a duct portion 13 which communicates the suction opening 10 to the vicinity of the bottom of the room 3 and a suction portion 15 provided with a suction fan 14. An exhaust outlet 16 is formed in the upper side portion of the suction portion 15. The suction fan 14 sucks air containing scattered hair from the suction opening 10 so that the sucked air is exhausted from the outlet 16 to the outside through the duct portion 13, the lower portion of the room 3 and the suction portion 15 after the sucked air went down in the duct portion 13 and went up in the suction portion 15. In the suction portion 15, a main filter 17 is removably mounted under the suction fan 14 and a pre-filter 18 is also removably mounted under the main filter 17. A hair collecting container 19 is disposed in the bottom of the room 3. The scattered hair of the dog sucked from the suction opening together with air also goes down within the duct portion 13 to be collected in the hair collecting container 19. Air containing another remaining hair and dust is exhausted from the outlet 16 provided with a filter such as a wire net to the outside after the remaining hair and dust in the air is removed through the pre-filter 18 and the main filter 19. A reference numeral 20 represents a plate protruding between the hair collecting container 19 and the pre-filter 18 and preventing the

collecting hair in the container 19 from flying up again.

A lower drying device 21 is disposed in the lower portion of the hair collecting room 3, which includes a heater H', a fan F' and a motor M', as shown in Fig. 3. The lower drying device 21 generates warm air to send it from a blast port 22 through a lower duct 23 disposed in the bottom of the room 1 and blow-off holes 24 disposed in the lower portion of the room 1 to the inside of the room 1 and at the same time to send warm air through the lower duct 23 and a duct 25 communicating with the side portion of the room 1 to the inside of the room 1 from the side of the room 1. A hole 27 formed in the lower portion of the room 1 communicates the room 1 with a suction opening 26 of the lower drying device 21 to circulate the warm air from the duct 23 through the room 1 and the suction opening 26 to the lower drying device 21. The warm air passing through the hole 27 and the blow-off holes 24 also goes through the net or draining board 28 disposed in the bottom of the room 1.

The hair drying apparatus as constructed above can be used so that the partition wall 5 is removed to accommodate a dog or dogs in opening condition when a large dog is accommodated or a plurality of dogs are accommodated. When it is desirable that wet hair is rapidly dried, the partition wall 5 can be used so that the room 1 is partitioned to form two small rooms 1' and 1'' and the partitioned small room 1' accommodates the dog while the other room 1'' can be also used for drying hair in an ordinary way. Then, by operating the various dials and switches on the operating panel of the drier unit 2, hot air is sent out. Sending of warm air, interruption of sending air or control of temperature of warm air can be made if desired. The dog sticks its nose out of the hole 6 so that the dog can breathe fresh air. A small amount of hair scattered as it is dried is caught by a filter 29 such as a wire net or the like disposed in the suction opening 26 to prevent the drier unit 2 and the lower drying device 21 from suffering damage. Warm air is sent onto the top, side and bottom surfaces of the dog, as shown in Fig. 3, to dry hair of the dog rapidly and completely.

After hair has been dried completely, the dog is put on the trimming table 2a and held to the pole 9 so that brushing or cutting operation is made, after the suction fan 14 of the hair collecting room 3 is turned on. The scattered hair produced by the brushing operation or the like is sucked into the hair collecting room 3 through the suction opening 10 to be collected in the hair collecting container 19. The collected hair in the container 19 is removed out of the room 3 together with the container 19 through the door 11 opened. The pre-filter 18 and the main filter 17 can be also removed for the purpose of cleaning.

Referring to Figs. 4 and 5, there is shown a hair collecting apparatus 38 provided with a door 42 containing a window formed of transparent glass

or methacrylate plastic plate. A suction opening 43 is formed in the upper side of a box 41. A partition wall 44 is extended down from the top of the box to the vicinity of the lower portion of the box and partitioned in the box 41 to form a suction portion 45 communicating with the suction opening 43 and an exhaust portion 46. A suction fan 47 is fixedly mounted in the upper portion of the exhaust portion 46 near a ceiling of the box. An exhaust outlet 48 is formed in the upper side of the box 41. In the exhaust portion 46, a main filter 49 is detachably mounted under the fan 47 and a pre-filter 50 is also detachably mounted under the main filter 49. A hair collecting container 51 is disposed in the bottom of the box 41. A plate 52 protrudes between the container 51 and the pre-filter 50 to prevent the collected hair in the container 51 from flying up again.

The hair collecting apparatus 38 as described above is placed in the vicinity of a trimming table for a pet animal or is placed on the side of the trimming table so that the suction opening 43 is directed toward the trimming table. When the suction fan 47 is operated, scattered hair produced by trimming of the pet animal is sucked into the suction portion 45 through the opening 43 together with air to go down in the suction portion 45 and be collected in the container 51. Air containing other remaining hair and dust passes through the pre-filter 50 and the main filter 49 to remove the other remaining hair and dust by the pre-filter and the main filter, so that air is exhausted from the outlet 48.

A hair collecting apparatus shown in Fig. 6 according to another embodiment is identical to the apparatus of Fig. 4 and 5 with the exception that the pre-filter 50 of Figs. 4 and 5 is replaced by a belt-like filter 53 formed of a net or the like and the plate 52 of Fig. 5 is replaced by a tilted plate 57 of which one end is fixedly mounted on the side wall 41a of the box 41 and the other end in the form of a wedge in section comes in contact with the lower surface of the filter 53 slightly to remove hair attached on the filter 53. The belt-like filter 53 is supported between a roller 54 supported on the partition wall 44 and a roller 55 supported on the side wall 41a of the box 41 and is rotated by a small motor 56.

The filter 53 is rotated by the motor in the clockwise direction so that the plate 57 can remove hair and dust attached on the lower surface of the filter 53 in filter action in order to clean the filter surface automatically. The removed hair and dust fall in the container 51.

Fig. 7 shows a hair collecting apparatus according to still another embodiment of the present invention, in which a suction fan 47 is disposed in the bottom of the box 41 and an exhaust opening 48 is formed in the lower side portion of the box 41. A main filter 49 is disposed above the fan 47 and a hair collecting container 51 is removably mounted above the filter 49. The bottom of the container 51 is formed of a fine net. Air is sucked through the suction opening 43 formed in the upper side portion of the box 41 by the fan 47 to fall down in the box 41 and, after passing through the bottom of the container 51, is exhausted from the outlet 48 to the outside of the box. The scattered hair of the pet animal sucked into the box together with air is filtered by the bottom of the container 51 and then collected in the container 51, so that hair and dust remaining in the air is further removed through the main filter 49.

Furthermore, the hair collecting apparatus 38 may include pipes coupled to the suction opening 43 and the exhaust outlet 48 so that suction and exhaust of hair can be made in any direction and position.

CLAIMS

1. An apparatus for drying pet animal's hair comprising a room (1) of a box type for accommodating the animal, a door (4) which is formed on the room so that the animal can enter the room and go out of the room, a hole (6) through which the room can communicate with the outside of the room so that the animal can breathe fresh air, and a device (2) for sending warm air into the room to dry the animal.
2. An apparatus according to claim 1, wherein the room includes a wall (5) for partitioning the room and which can be removed from the room and fit in the room.
3. Apparatus according to claim 1, wherein the room forms a trimming table (2a) on the top plate of the room.
4. An apparatus according to claim 3, wherein an opening (10) is formed on at least one side wall of the room for sucking scattered hair produced by trimming the pet animal's hair.
5. An apparatus for collecting pet animal's hair comprising a box, a suction fan (14) an exhaust outlet (16) a filter (17) and a hair collecting container disposed in the box, respectively.
6. An apparatus for collecting pet animal's hair substantially as herein before described with reference to, and as shown in, the accompanying drawings.

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